Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A contrast agent for diagnostic imaging comprising:

a) an image-enhancing moiety (IEM);

b) a plasma protein binding moiety (PPBM); and

c) a blood half-life extending moiety (BHEM), the contrast agent demonstrating at least about 10% binding to plasma proteins and, in a rat plasma pharmacokinetic experiment, an area under the plasma concentration versus time curve from 0 to 10 minutes which is at least about 20% greater than that observed for the combination of the IEM and the PPBM alone without the BHEM.

2. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is selected from the group consisting of organic molecules, metal ions, salts or chelates, particles, iron particles, or labeled peptides, proteins, polymers or liposomes.

3. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is a physiologically compatible iron particle or metal chelate compound consisting of one or more cyclic or acyclic organic chelating agents complexed to one or more paramagnetic metal ions with atomic numbers 21-29, 42, 44, or 57-83.

4. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is an iodinated organic molecule or a physiologically compatible metal chelate compound consisting of one or more cyclic or acyclic organic chelating agents complexed to one or more metal ions with atomic numbers 57 to 83.

5. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is gas-filled bubbles or particles or a physiologically compatible metal chelate compound consisting of one or more cyclic or acyclic organic chelating agents complexed to one or more metal ions with atomic numbers 21-29, 42, 44, or 57-83.

6. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety consists of a radioactive molecule.

7. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is a physiologically compatible metal chelate compound consisting of one or more cyclic or acyclic:organic chelating agents complexed to one or more metal ions with atomic numbers 27, 29, 31, 43, 47, 49, 75, 79, 82 or 83.

8. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is a physiologically compatible metal chelate compound consisting of one or more cyclic or acyclic organic chelating agents complexed to Tc-99m.

9. (Original) The contrast agent according to claim 1, wherein the image-enhancing moiety is an organic or inorganic dye.

10. (Original) The contrast agent according to claim 1, wherein the plasma protein binding moiety binds to human serum albumin.

11. (Original) The contrast agent according to claim 10, wherein the plasma protein binding moiety comprises an aliphatic group and/or at least one aryl ring.

12. (Original) The contrast agent according to claim 10, wherein the plasma protein binding

moiety comprises a peptide containing hydrophobic amino acid residues and/or substituents with or without hydrophobic or hydrophilic termination groups.

13. (Original) The contrast agent according to claim 10, wherein the plasma protein binding moiety contains at least one aryl ring.

14. (Original) The contrast agent according to claim 10, wherein the plasma protein binding moiety contains at least two aryl rings held rigidly in a non-planar fashion.

15. (Original) The contrast agent according to claim 1, wherein the blood half-life extending moiety possesses one or more full or partial negative charges in aqueous solution at physiological pH wherein the negative charge cannot be partially or fully neutralized by covalent or coordinate covalent bonding to the image-enhancing moiety.

16. (Original) The contrast agent according to claim 1, wherein the contrast agent demonstrates at least about 50% binding to plasma proteins.

17. (Original) The contrast agent according to claim 1, wherein the contrast agent demonstrates at least about 80% binding to plasma proteins.

18. (Original) The contrast agent according to claim 1, wherein the contrast agent demonstrates at least about 95% binding to plasma proteins.

19-102. (Cancelled)